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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,302	12/30/2003	Chih-Ping Hsu	030221	1672

23696   7590   07/15/2008
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EXAMINER
GESESSE, TILAHUN

ART UNIT	PAPER NUMBER
2618	

NOTIFICATION DATE	DELIVERY MODE
07/15/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
	10/750,302	HSU ET AL.
Office Action Summary	Examiner	Art Unit	
	Tilahun B. Gesesse	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>12 March 2008</u>.
2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-32</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-3,5-8,10-15,18-28 and 30-32</u> is/are rejected.
7)☒ Claim(s) <u>4,9,16,17 and 29</u> is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
            application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed March 12,2008 have been fully considered but they

are not persuasive.

Shui discloses a device (base station or terminal device, see figure 1) in

communication system (see figure 1) . Shui teaches data processor (see figure

2A and 2B) in which plurality transport channels processed data blocks (see

figure 3 and 4) in which the data blocks in transmission time interval (TTI).

Shui also teaches a controller (at the base station and terminal device, 522 of

figure 5).   Shui teaches the inner loop maintain the signal quality of a data

transmission received at terminal as close as possible to a target SNIR (i.e.,

set-point, see col.8, lines 33-35) for plurality of transport channels (see figure 3

and 4) .

Shui teaches measuring the signal quality of the data transmission at the

terminal (see 512 of fig.5) , comparing the received signal quality (SNIR) against

the target SNIR (514 of fig.5). to adjust it's transmit power for data transmission

up or down command to adjust according the target SNIR, see col.8, lines 46-

65).

Shui discloses inner loop (see 510 of fig.5) maintains the received SNIR

at or near the target SNIR in the presence of changes in the communication

channel (see col.8, lines 63-65) based on the status of the at least one data block

received in the update interval see col.8, lines 46-65 , col.8, lines 66-col.9, line

37 and figure 7) in which receive data blocks of transport channel (712 of fig.7)

determine if any transport channel received in error with transmission time

interval and adjust based on the target SNIR (see fig.8).

On page 12, third paragraph of response applicant argued that Shui does

not teach or suggest "a controller maintains a single signal quality target for the

plurality of transport channels."   And " this target SNIR is for the physical

channel and not for the plurality of transport channels."

The examiner respectively disagrees. Shui teaches the inner loop

maintain the signal quality of a data transmission received at terminal as close as

possible to a target SNIR (i.e., set-point, see col.8, lines 33-35) for plurality of

transport channels (see figure 3 and 4) . Shui teaches the inner loop maintain the

signal quality of a data transmission received at terminal as close as possible to

a target SNIR (i.e., set-point, see col.8, lines 33-35) for plurality of transport

channels (see figure 3 and 4) .

On page 14, third paragraph of response applicant argued that Shui does

not teach or suggest "adjust the single SIR target based on the status of the at

least one data block received in the current update interval."

The examiner respectively disagrees. Shui teaches measuring the signal

quality of the data transmission at the terminal (see 512 of fig.5) , comparing the

received signal quality (SNIR) against the target SNIR (514 of fig.5). to adjust its

transmit power for data transmission up or down command to adjust according

the target SNIR, see col.8, lines 46-65).

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

3.   Claims 1,5-6, 23 and 26 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

4.   Claims 1,5-6, 23 and 26 , recites " without maintaining an individual SIR target for

each transport channel" such negative recitation renders 35 USC 112 2nd paragraph.

the claims are indefinite because they merely with out any active , positive step.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

2.   Claims 1-3,15, 18-25 rejected under 35 U.S.C. 102(e) as being anticipated by

Shiu.

        Claim1, Shiu teaches a device in a wireless communication system (see fig. 1).

Shiu teaches a data processor (522 of fig.5) operative to process at least one data block, (see fig.3) received in a current update interval and on at least one transport channel among a plurality of transport channels, and to provide a status of each of the at least one data block (col.8, line 59 through col.9 line 37).

Shiu teaches a controller (522 of fig.5) operative to adjust a single signal quality (SIR) target maintained for the plurality of transport channels based on status of the at least one data block received in the current update interval, (column 4, lines 7-62). Shiu teaches the SIR target is adjusted by all data blocks received on all transport channels in the current update interval and is used for power control of data transmission on the plurality of transport channels, (see fig. 5 and col.9, lines 10-46 and col. 12, lines 52-62, column 7, lines 64- column 19, lines 24-43 and column 24, lines 41-64 and figures 5, 12-13).

Claim 2, Shiu teaches the controller (522 of fig.5) is operative to increase the SIR target based on an up step if any one of the at least one data block is an erased data block and to decrease the SIR target based on a down step if all of the at least one data block is good data blocks (see figs. 6-8 and col.9, lines 10-46 and co1.12, lines 52-62).

Claim 3 Shiu teaches each of the plurality of transport channels is associated with a respective down step size, and wherein the up step is a fixed value and the down step is set to a smallest down step size among down step sizes for transport channels with erased data blocks in the current update interval (see fig. 6-8 and col.9, lines 10-46 and col. 12, lines 52-62).

Claim 5, Shiu teaches all limitations as explained above in claim 1. it is a

apparatus claims, which correspond to system claim 1 above, therefore, it is analyzed
and rejected for same reason as set forth in the claim.

Claim 6. Shiu teaches all Imitations as explained above in claim 1. it is a
apparatus claims, which correspond to system claim 1 above, therefore, it is analyzed
and rejected for same reason as set forth in the claim. Further more, Shui teaches
increase or decrease based on the single SIR target if one data block in the current
update interval (see figures 6-7) in which data block is good or bad increase or
decrease based on the single SIR target.

Claims 7-8, Shiu teaches each of the at least one transport channel is associated
with a respective block error rate target, and wherein the controller is operative to
increase or decrease the SIR target to meet or exceed the BLER target for each of the
at least one transport channel (see figs.6-8 and col. 9, lines 10-46).

Claim 10, Shiu teaches the controller is operative to increase the SIR target by
an up step having a fixed size and to decrease the SIR target by a down step having an
adjustable size (sees figs. 6-8 and col.9, lines 10-46 and col. 12, lines 52-62).

Claim 11, Shiu teaches each of the plurality of transport channels is
 associated with a respective down step size selectable as the down step used to
decrease the SIR target (see figures 6-8 and col. 9, lines 10-46).

Claim 12. Shiu teaches the controller is further operative to set the down step to
a smallest down step size among down step sizes for transport channels
with erased data blocks in the current update interval (see figure 5 and co1.9, lines 10-

46).

Claim 13, Shiu teaches the down step size for each of the plurality of transport channels is determined based on a block error rate target and at least one transport format selected for the transport channel (see figure 5).

Claim 14. Shiu teaches the controller is further operative to saturate the SIR target to be within a predetermined range of values (column 4, lines 7-62).

Claims 15, Shiu teaches set to a second value otherwise, the first value being larger than the second value and the up step is set to a first value if an erased block is received for a transport channel without an erased block in a prior update interval and set to a second value otherwise, the first value being larger than the second value (see fig. 11).

Claim 18. Shiu teaches a transmit power control (TPC) processor operative to compare a received SIR for the data transmission against the SIR target and provide TPC commands used to adjust transmit power for the data transmission (see figs.5).

Claim 19, Shiu teaches the wireless communication system is a Code Division Multiple Access (CDMA) system (column 1, line 23-31).

Claim 20, Shiu teaches an apparatus in a wireless communication system (see figures 3A and 3).

Shiu teaches means for processing (fig. 5, 522) at least one data block received in a current update interval and on at least one transport channel among a plurality of transport channels (see column 9, lines 10-46).

Shiu teaches means for determining a status of each of the at least one data

block received in the current update interval as a good data block or an erased data block (column 4, lines7-62).

Shiu teaches means for increasing a signal quality (SIR) target if any one of the at least one data block received in the current update interval is an erased data (col.9, lines 10-46 and co1, 12, lines 52-62).

Shiu teaches means for decreasing the SIR target if all of the at least one data block received in the current update interval are good data blocks, wherein the SIR target is used for power control of data transmission on the plurality of transport channels (see column 9, lines 10-46 and col. 12, lines 52-62).

Claim 21. Shiu teaches a processor readable media for storing instructions operable in a wireless device (column 9, lines 10-46).

Shiu teaches process at least one data block received in a current update interval and on at least one transport channel among a plurality of transport channels (column 9, lines 10-46).

Shiu teaches determine a status of each of the at least one data block received in the current update interval as a good data block or an erased data block (see column 4, lines 7-62 and co1.12, 51-61) increase a signal quality (SIR) target if any one of the at least one data block received in the current update interval is an erased data block and decrease the SIR target if all of the at least one data block received in the current update interval is good data blocks, wherein the SIR target is used for power control of data transmission on the plurality of transport channels (see column 7, lines 64- column 19, lines 24-43 and column 24, lines 41-64 and figures 5, 12-13, col.9, lines 10-46).

Claims 22, and 25, Shiu teaches all limitations as explained above in claim

20. they are method claims, which correspond to apparatus claim 20 above, therefore,

it is analyzed and rejected for same reason as set forth in the claim. Further

more, Shui discloses a device (base station or terminal device, see figure 1) in

communication system (see figure 1) . Shui teaches data processor (see figure

2A and 2B) in which plurality transport channels processed data blocks (see

figure 3 and 4) in which the data blocks in transmission time interval (TTI).

Shui also teaches a controller (at the base station and terminal device, 522 of

figure 5).   Shui teaches the inner loop maintain the signal quality of a data

transmission received at terminal as close as possible to a target SNIR (i.e.,

set-point, see col.8, lines 33-35) for plurality of transport channels (see figure 3

and 4) .

Shui teaches measuring the signal quality of the data transmission at the

terminal (see 512 of fig.5) , comparing the received signal quality (SNIR) against

the target SNIR (514 of fig.5). to adjust it's transmit power for data transmission

up or down command to adjust according the target SNIR, see col.8, lines 46-

65).

Shui discloses inner loop (see 510 of fig.5) maintains the received SNIR

at or near the target SNIR in the presence of changes in the communication

channel (see col.8, lines 63-65) based on the status of the at least one data block

received in the update interval see col.8, lines 46-65 , col.8, lines 66-col.9, line

37 and figure 7) in which receive data blocks of transport channel (712 of fig.7)

determine if any transport channel received in error with transmission time

interval and adjust based on the target SNIR (see fig.8).

Claims 23-24, Shiu teaches all limitations as explained above in claim 20. they

are a system claims, which correspond to system claim 20 above, therefore, it is

analyzed and rejected for same reason as set forth in the claim.

Claims 26-27,30-32 Shui discloses a device (base station or terminal device,

see figure 1) in communication system (see figure 1) . Shui teaches data processor

(see figure 2A and 2B) in which plurality transport channels processed data blocks (see

figure 3 and 4) in which the data blocks in transmission time interval (TTI).

Shui also teaches a controller (at the base station and terminal device, 522 of

figure 5).   Shui teaches the inner loop maintain the signal quality of a data

transmission received at terminal as close as possible to a target SNIR (i.e.,

set-point, see col.8, lines 33-35) for plurality of transport channels (see figure 3

and 4) .

Shui teaches measuring the signal quality of the data transmission at the

terminal (see 512 of fig.5) , comparing the received signal quality (SNIR) against

the target SNIR (514 of fig.5). to adjust it's transmit power for data transmission

up or down command to adjust according the target SNIR, see col.8, lines 46-

65).

Shui discloses inner loop (see 510 of fig.5) maintains the received SNIR

at or near the target SNIR in the presence of changes in the communication

channel (see col.8, lines 63-65) based on the status of the at least one data block

received in the update interval see col.8, lines 46-65 , col.8, lines 66-col.9, line

37 and figure 7) in which receive data blocks of transport channel (712 of fig.7)

determine if any transport channel received in error with transmission time

interval and adjust based on the target SNIR (see fig.8).

claims 30-32, Shiu teaches each of the plurality of transport channels is

associated with a respective down step size, and wherein the up step is a fixed value

and the down step is set to a smallest down step size among down step sizes for

transport channels with erased data blocks in the current update interval (see fig. 6-8

and col.9, lines 10-46 and col. 12, lines 52-62).

Allowable Subject Matter

Claims 4,9 and 16-17, 29 are allowed. The following is an examiner's statement

of reasons for allowance: Chiu does not teach each of the at least one data block

received in the current update interval is associated with a respective block duration,

wherein the down step indicates an amount of adjustment to the SIR target per frame,

and wherein the adjustment duration indicates the number of frames for which to apply

the adjustment to the SIR target.

Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

.   ***Conclusion***

3.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

        Engstrom et al (US 6,639, 934) teaches SIR target and processing signal (See

figures 5 and 6)

        Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tilahun B. Gesesse whose telephone number is 571-

272-7879. The examiner can normally be reached on flex.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Matthew Anderson can be reached on 571-272-4177. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 7, 2008   Tilahun B Gesesse
T.B.G   Primary Examiner
                                                            Art Unit 2618

     /Tilahun Gesesse/
Primary Examiner, Art Unit 2618